IN THE CLAIMS

Claims 1-14 were previously cancelled. Claims 15, 16, 31, 32, 33 and 34 are currently amended. Claims 17, 18, 27-30, 35 and 36 are currently cancelled. Claims 19-26 are carried forward, all as follows:

Claims 1-14 (Cancelled)

15.   (Currently Amended) A method for analyzing color deviation of printed images including:

 providing a printed image;

 providing a printed image sensor;

 using said printed image sensor for generating separate pixel by pixel image sensor signals of each of first, second and third color channels of said a printed image;

 providing said first, second and third color channels as red, green and blue color channels, respectively, said first, second and third color channels reproducing color perceptions generated in a human eye;

 providing a separate printed image sensor signal for each of said first, second and third separate separated color channels;

 providing a first calculation specification consisting of at least a first arithmetic rule;

 linking said first color channel printed image sensor signal with said second color channel printed image sensor signal by using said first calculation specification;

 generating a first printed image output signal of a first resultant compensation color channel representing a red/green receptive field of color perception of a human eye using said first calculation specification linked first and second color channel image sensor signals;

 providing a second calculation specification consisting of at least a second arithmetic rule;

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linking said third color channel image sensor signal with a combination of said first and second color channel image sensor signals by using said second calculation specification;

generating a second <u>printed image</u> output signal of a second resultant compensation color channel <u>representing a blue/yellow receptive field of color perception of a human eye</u> using said second calculation specification linked third color channel image sensor signal and said combination of said first and second color channel image signals;

~~forming said first resultant compensation color channel corresponding to a red/green receptive field of color perception of a human eye;~~

~~forming said second resultant compensation color channel corresponding to a blue/yellow receptive field of color perception of a human eye;~~

selecting said first calculation specification for forming a weighted difference between said second color channel image sensor signal and said first color channel image sensor signal <u>corresponding to a first color perception of a human eye</u>;

selecting said second calculation specification for forming a weighted difference between said combination of said first color channel image sensor signal and said second color channel image sensor signal, and said third color channel image sensor signal <u>corresponding to a second color perception of a human eye</u>; ~~and~~

<u>providing at least one reference image;</u>

<u>generating first and second reference image output signals of first and second reference image compensation channels;</u>

<u>providing a reference memory and storing said first and second reference image output signals of said first and second reference image compensation channels in said reference memory;</u>

<u>storing said first and second printed image output signals of said first and second printed image compensation changes in said reference memory;</u>

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providing a classification system;

using said classification system for comparing said first and second reference image output signals with said first and second printed image output signals in said reference memory;

classifying said first and said second output signals of said first and second compensation color channels, representing said receptive fields of color perception of a human eye using said classification system; and

determining an acceptability of said human eye color perception of said printed image based on ~~using~~ said classification of said first and second printed image output signals with said first and second reference image output signals performed in said classification system.

16.   (Currently Amended) A method for analyzing color deviation of printed images including:

providing a printed image;

providing a printed image sensor;

using said printed image sensor for generating separate pixel by pixel image sensor signals of each of first, second and third color channels of said ~~a~~ printed image;

providing said first, second and third color channels as red, green and blue color channels, respectively, said first, second and third color channels reproducing color perceptions generated in a human eye;

providing a separate printed image sensor signal for each of said first, second and third separate ~~separated~~ color channels;

providing a first calculation specification consisting of at least a first arithmetic rule;

linking said first color channel printed image sensor signal with said second color channel printed image sensor signal by using said first calculation specification;

generating a first <u>printed image</u> output signal of a first resultant compensation color channel <u>representing a red/green receptive field of color perception of a human eye</u> using said first calculation specification linked first and second color channel image sensor signals;

providing a second calculation specification <u>consisting of at least a second arithmetic rule</u>;

linking said third color channel image sensor signal with a combination of said first and second color channel image sensor signals by using said second calculation specification;

generating a second <u>printed image</u> output signal of a second resultant compensation color channel <u>representing a blue/yellow receptive field of color perception of a human eye</u> using said second calculation specification linked third color channel image sensor signal and said combination of said first and second color channel image signals;

~~forming said first resultant compensation color channel corresponding to a red/green receptive field of color perception of a human eye;~~

~~forming said second resultant compensation color channel corresponding to a blue/yellow receptive field of color perception of a human eye;~~

selecting said first calculation specification for forming a weighted difference between said second color channel image sensor signal and said first color channel image sensor signal <u>corresponding to a first color perception of a human eye</u>;

selecting said second calculation specification providing a linkage of a minimum one of the first color channel image sensor signal and the second color channel image sensor signal, with said third color channel image sensor signal <u>corresponding to a second color perception of a human eye</u>; ~~and~~

<u>providing at least one reference image;</u>

<u>generating first and second reference image output signals of first and second reference image compensation channels;</u>

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providing a reference memory and storing said first and second reference image output signals of said first and second reference image compensation channels in said reference memory;

storing said first and second printed image output signals of said first and second printed image compensation changes in said reference memory;

providing a classification system;

using said classification system for comparing said first and second reference image output signals with said first and second printed image output signals in said reference memory;

classifying said first and said second output signals of said first and second compensation color channels, representing said receptive fields of color perception of a human eye using said classification system; and

determining an acceptability of said human eye color perception of said printed image based on ~~using~~ said classification of said first and second printed image output signals with said first and second reference image output signals performed in said classification system.

17.   (Cancelled)

18.   (Cancelled)

19.   (Previously Presented) The method of claim 15 further including providing each of said first, second and third color channels with adaptable spectral sensitivity.

20.   (Previously Presented) The method of claim 16 further including providing each of said

first, second and third color channels with adaptable spectral sensitivity.

21.   (Previously Presented) The method of claim 15 further including providing at least one of said first and second calculation specification as a non-linear transformation.

22.   (Previously Presented) The method of claim 16 further including providing at least one of said first and second calculation specification as a non-linear transformation.

23.   (Previously Presented) The method of claim 15 further including weighting each of said first, second and third color channel image sensor signals with a coefficient.

24.   (Previously Presented) The method of claim 16 further including weighting each of said first, second and third color channel image sensor signals with a coefficient.

25.   (Previously Presented) The method of claim 15 further including providing a low pass filter in at least one of said first and second compensation color channels.

26.   (Previously Presented) The method of claim 16 further including providing a low pass filter in at least one of said first and second compensation color channels.

27.   (Cancelled)

28.   (Cancelled)

29.   (Cancelled)

30.   (Cancelled)

31.   (Currently Amended) The method of claim 15 29 including selecting said classification system from linear and non/linear classification systems including threshold value classifiers, Euclidic distance classifiers, Bayes classifiers, fuzzy classifiers and artificial neuronic networks.

32.   (Currently Amended) The method of claim 16 30 including selecting said classification system from linear and non/linear classification systems including threshold value classifiers, Euclidic distance classifiers, Bayes classifiers, fuzzy classifiers and artificial neuronic classifiers.

33.   (Currently Amended) The method of claim 15 27 further including providing said reference image output signals data values for a plurality of said reference images in said reference data memory and using said reference image output signals data values for determining delivering a tolerance window for said reference image output signals data values.

34.   (Currently Amended) The method of claim 16 28 further including providing said reference image output signals data values for a plurality of said reference images in said reference data memory and using said reference image output signals data values for determining delivering a tolerance window for said reference image output signals data values

35.   (Cancelled)

36.   (Cancelled)